

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

<u>Certified Mail</u> <u>Return Receipt Requested</u>

REPLY TO ATTENTION OF:

September 20, 1991

Mr. Pat Doyle Peoples Gas 122 South Michigan Ave. Room 1035 Chicago, IL 60603

Re: Final Disapproval of Work Plan

Dear Mr. Doyle:

Attached are the final comments on the Work Plan for the Waukegan Manufactured Gas and Coke Plant Site in Waukegan, Illinois. All attached comments must be incorporated into the Final Work Plan within 30 days of receipt of this letter. All comments using quotation marks must be incorporated as stated. Failure to incorporate all comments will leave U.S. EPA with two primary enforcement options: take over the project or enforce the order.

Please reduce the number of copies of the Final Work Plan sent to U.S. EPA to 6, the Field Sampling Plan and the Quality Assurance Project Plan to 5. The State of Illinois will need 3 of each. Under separate cover, I am transmitting Canonie's summary report for construction of the Slip 4 for your information.

Please call me if you have any questions.

Sincerely,

Cindy J.XNolan

Remedial Project Manager

cc: Scott Moyer, IEPA
Sean Mulroney, ORC
Rick Hersemann, PRC
Jim Langseth, Barr Eng.

## WORK PLAN

1. p.4-10. 2nd para. 3rd sentence. Change to: The slip was designed for activities associated with recreational boat use. Delete the next sentence beginning with "A marina ...."

 p.4-10 2nd para. 5th sentence. Change to: "At a June 13,
 meeting, the City of Waukegan Building Commissioner indicated that he was not aware of any viable development plans for the site or adjacent water front areas. However, long term land development desires include such ideas as condominiums and recreational land use once existing contamination problems are resolved. A boat launch project proposed by the Waukegan Port District has been canceled."

- p.4-12. 2nd line, top of page. Add: "Terrestrial organisms that come on-site are potentially exposed to contaminated soil."
- 4. p.6-2. Add a subtask to Task 1 for an Ecological Survey. Add the following language to the subtask: "An environmental site survey will be conducted. This will include an identification of terrestrial and aquatic habitats on and near the site, identification of wetlands, and/or floodplains, and common and endangered species plant and animal species. A map(s) developed for this site will note pertinent ecological features. Information from previous studies will be used and updated where plant and animal species and habitat information has changed. Available ecological studies sediment and surface water results will be summarized. In addition, the results of phase I will identify the contaminants of concern and a preliminary mass loading to the surface water."
- 5. p.6-9. Backhoe is not a standard technique for collecting  $\mathcal{M}^{\alpha}$ discrete soil samples and is not acceptable. Instead, use the same sample method as described on p3-3 of the Field Sampling Plan for off-site soil samples (hand auger). Visual information can still be obtained by using the backhoe next to the hand augured sample location.
- p.6-5, and FSP p.3-6. Preliminary Source Area Characterization must include characterization for the coal stockpile area. A residual coal layer remains in this area and its human health and environmental effect must be evaluated. Given the location of this site, it seems likely that high sulfur coal would have been used at this site. In addition to the direct contact threat concern, a low soil pH and subsequent release of metals seems likely. One full scan analysis for VOCs, Acid/Base/Neutral, inorganic parameters, TCLP and soil pH of this layer is required in Phase I. Modify the work plan as appropriate to incorporate this objective.
- 7. p.6-20. Field soil pH must be added to the field parameters

for all soil samples. Corrosivity and Reactivity must be added for samples at the Sulfur Pile and Thionizer area.

- 8. p.6-27. Section 6.4.4.2. Change Title from Surface Water Sampling to Ecological Sampling. Change the paragraph to read: "If the hydrogeological investigation identifies contaminated ground water moving off site and discharging to surface waters, samples may be collected from Lake Michigan and/or Waukegan Harbor as appropriate for evaluation of the human or ecological 4 140 risk assessment as needed. Further biological analysis may or may not be needed depending on the results of phase I Technical Memorandum identification of likely contaminants of concern, indigenous plant and animal species present, likelihood for the contaminant to effect those species, and other pertinent data identified in the Phase I Ecological Survey. Sampling procedures and analytical parameters will be defined in the Phase II investigation work plan."
- Figure 6.3-1. Add a trench west of the former wood treating area. There is room for a trench between Slip 4, the sand pile and the existing waste pile.
- Figure 6.3-1. The samples noted in the pond areas are intended for preliminary identification of possible source areas. However, there is little benefit to a limited visual characterization allowed by a boring. Samples of this area are therefore, not discretionary. Include these locations for laboratory analysis of the analytical parameters intended for source areas.
- Table 6.3-1 Add VOCs to the analytical parameters for the 15 Williams source soils characterization samples. Also, 25 samples are assumed, not 15. This resolves discrepancy between table 6.3-1 and page 6-8.
- 12. p.6-8, Section 6.3.3, also p.6-21, Section 6.4.2.2 (and p3-2 of FSP): Background soil samples must be analyzed for total organic carbon (TOC) in addition to the full-scan target compounds. The work plan calls for TOC analysis of 3 clay till samples and 3 surface soil samples from on-site locations only. Method 9060 in SW-846 described in the QAPP applies to liquid samples. The Standard Operating Procedure for TOC is not attached to the Quality Assurance Project Plan. Submit the SOP showing the modifications to the method for use on soil samples or describe and include a different method suitable for TOC in soil.
  - Table 6.12-1 Project Schedule. An enforceable schedule must include start and complete dates along with duration.

## FIELD SAMPLING PLAN

- 1. p3-13, Section 3.5.3: The drilling technique for the bedrock borehole must be described. Describe the disposal of the borehole soil cuttings.
- 2. P3-14, Paragraph 1: The construction details for the decontamination pit must be included. Describe under what circumstances the use of solvents will or will not be used. Also state which solvents are likely to be used.
- 3. P3-20, top paragraph: Change the sand pack distance above the well screen from 5 feet to 1 to 2 feet above the well screen.
- 4. Page 3-23, Paragraph 1: Add "Water levels will be measured before sample collection." This must also be stated in Attachment 6, page 6-1.
- 5. Purge water disposal options are acceptable to U.S. EPA, but the specific method for disposal must be identified before field work begins and must be acceptable to the land owner, OMC.
- 6. Attachment 5 must be changed to require daily calibration of the conductivity meter. Weekly calibration is too infrequent.
- 7. Attachment 8, P8-1: The criteria for preservation of VOCs samples is to lower the pH below 2. A field check must be done to see that the number of drops of preservative added to the VOC sample bottle in fact does this.
- 8. The IEPA Standard Operating Procedures should be referenced in the FSP, or if incorporated completely, they should be an attachment to the FSP.
- 9. p.3-9 discusses trenching procedures. Note that Region 5 policy is to have a minimum of 10% sample splits (co-located samples). In order for EPA to select which samples to split, the trench must be left open until that trench is complete. The trench can be closed after the last sample, instead of opening and closing the trench as it progresses.
- 10. The Standard Operating Procedure for Headspace analysis was not included in this work plan and its attachments. The draft provided for review seems adequate. Please include it in the final plans.